

Abstract

A thermal treatment apparatus, a method for manufacturing a semiconductor device, and a method for manufacturing a substrate, wherein the occurrence of slip dislocation in a substrate during heat treatment is reduced, and a high-quality semiconductor device can be manufactured, are intended to be provided.

A substrate support 30 is formed from a main body portion 56 and a supporting portion 58. In the main body portion 56, a plurality of placing portions 66 extend parallel, and supporting portions 58 are provided on the placing portions 66. A substrate 68 is placed on the supporting portion 58. The supporting portion 58 has a smaller area than an area of a flat face of the substrate, and is formed from a silicon plate having a thickness larger than thickness of the substrate, so that deformation during heat treatment is reduced. The supporting portion 58 is made of silicon, and a layer coated with silicon carbide (SiC) is formed on a substrate-placing face of the supporting portion 58.

FIG.12

TEMPERATURE (°C)

TIME